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| 09/266,675      | 03/11/1999  | RANDY S. KIMMERLY    | 777.278US1          | 6126             |

7590

09/13/2002

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EXAMINER

LY, ANH

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 09/13/2002

#10

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/266,675

Applicant(s)

KIMMERLY, RANDY S.

Examiner

Anh Ly

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 07/23/2002 with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.
2. Claims 1-24 are pending in this application.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-6, 9-18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,330,709 issued to Johnson et al. (herein Johnson) in view of US Patent No. 6,216,152 issued to Wong et al. (herein Wong).

With respect to claim 1, Johnson discloses generating a cache of information relating to the classes (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19); requesting a search of the class (col. 19, lines 9-34); and searching the cache to satisfy the requested search (col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6).

Johnson does not explicitly indicate, "a class path."

However, Wong discloses class path as claimed (col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

Claim 2 is essentially the same as claim 1 except that it is directed to a computer readable medium rather than a method ('709 of col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; '152 of col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16), and is rejected for the same reason as applied to the claim 1 hereinabove.

With respect to claim 3, Johnson discloses a method of locating classes as discussed in claim 1, also Johnson discloses multiple classes as claimed (col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34).

Johnson does not explicitly indicate, "a class path."

However, Wong discloses class path as claimed (col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claim 5, Johnson discloses generating a search request; and independently satisfying the request in association with each element in the class path, wherein at least one of the elements has a cache of information sufficient to satisfy the request for that element (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34)

Johnson does not explicitly indicate, “a class path.”

However, Wong discloses class path as claimed (col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load

the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

Claim 6 is essentially the same as claim 5 except that it is directed to a computer readable medium rather than a method ('709 of col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34; '152 of col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16), and is rejected for the same reason as applied to the claim 5 hereinabove.

With respect to claim 9, Johnson discloses Java persistent container as for java package manager as claimed (col. 10, lines 22-58 and col. 13, lines 7-67).

With respect to claim 10, Johnson discloses determining which elements are viable for caching; and initiating creation of caches for those elements, which are viable (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34).

Johnson does not explicitly indicate, "parsing the class path into names of elements."

However, Wong discloses Parser as claimed (col. 5, lines 41-67, col. 6, lines 1-67 and col. 7, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claims 11-14, Johnson discloses wherein the viability of an element for caching is dependent on the ease of tracking which elements have had changes in them; wherein the viability of an element for caching is determined based on it being a predetermined type; checking a registry to see if the element already has a cache associated with it; and determining if an existing cache is up to date (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34).

With respect to claim 15, Johnson discloses means for receiving requests to search a multi-elements for classes; and means for transferring such requests through a wrapper associated with each element to invoke specific methods (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-67; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34).

Johnson does not explicitly indicate, “a class path.”

However, Wong discloses class path as claimed (col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to have a class path manager for a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claim 16, Johnson discloses wherein at least one such element specific search method comprises searching a cache associated with such element (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-67).

With respect to claim 17, Johnson discloses means for determining whether each element is a viable cache candidate; means for creating a cache for such viable and means for creating indirection wrappers for each element to map class searches to each element for independent handling (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34; col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19).



Johnson does not explicitly indicate, "means for paring the multi-element class path into names of elements."

However, Wong discloses parsing as claimed (col. 2, lines 16-45, col. 5, lines 41-67, col. 6, lines 1-67 and col. 7, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to have a class path manager for a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claim 18, Johnson discloses wherein the cache for each viable candidate comprises a name of the class (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6).

With respect to claim 21, Johnson discloses wherein the viability of an element for caching is dependent on the ease of tracking which elements have had changes in them as claimed (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6).

With respect to claim 22, Johnson discloses a cache for a cache viable element that receives and provides a transparent level of indirect to services that are specific to

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such cache viable element (col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-67; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34).

Johnson does not explicitly indicate, "a class path."

However, Wong discloses class path as claimed (col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to have a system for finding classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

Claim 23 is essentially the same as claim 5 except that it is directed to a computer readable medium rather than a method ('709 of col. 12, lines 18-67, col. 13, lines 1-6, col. 15, lines 9-67 and col. 16, lines 1-19; col. 19, lines 9-34; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6; col. 4, lines 26-36, col. 10, lines 22-58, col. 12, lines 18-67, col. 13, lines 1-67 and col. 19, lines 9-34; '152 of col. 6, lines 11-25, col. 7, lines 5-67 and col. 8, lines 1-16), and is rejected for the same reason as applied to the claim 5 hereinabove.

With respect to claim 24, Johnson a computer-readable medium as discussed in claim 23.

Johnson does not explicitly indicate, "checking date/time stamp on the element having the cache of information to determine if the cache is up to date."

However, Wong discloses prefetching function to record the time as claimed (col. 6, lines 11-67 and col. 7, lines 1-4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson with the teachings of Wong so as to have a computer-readable medium to perform a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

5. Claims 4, 7-8 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,330,709 issued to Johnson et al. (herein Johnson) in view of US Patent No. 6,216,152 issued to Wong et al. (herein Wong) and further in view of US Patent No. 5,937,411 issued to Becker.

With respect to claim 4, Johnson in view of Wong discloses a method of locating classes as discussed in claim 1.

Johnson in view of Wong does not explicitly indicate, "a zip file."

However, Becker discloses a zip file as claimed (col. 3, lines 18-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson in view of Wong with the teachings of Becker so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claims 7-8, Johnson in view of Wong discloses a method of locating classes as discussed in claim 5.

Johnson in view of Wong does not explicitly indicate, “a zip file and Java classes.”

However, Becker discloses a zip file as claimed (col. 3, lines 18-38 and col. 2, lines 8-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson in view of Wong with the teachings of Becker so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

With respect to claims 19-20, Johnson in view of Wong discloses a method of locating classes as discussed in claim 17, also Johnson discloses Java Package

Manager as persistent container and cache as claimed (col. 10, lines 22-58 and col. 13, lines 7-67; col. 11, lines 28-67, col. 12, lines 18-67 and col. 13, lines 1-6).

Johnson in view of Wong does not explicitly indicate, "a zip file."

However, Becker discloses a zip file as claimed (col. 3, lines 18-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Johnson in view of Wong with the teachings of Becker so as to obtain a method of locating classes in a multi element class path because the combination would provide the method having a search for all locations of a class path to be performed, and when the class is located, the VM's loader will load the class for the application (Wong – col. 2, lines 16-45) in the locating classes in the directory environment.

### **Contact Information**

6. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527 or via E-mail: ANH.LY@USPTO.GOV. The examiner can be reached on Monday - Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7238 (after Final Communication)

or:

(703) 746-7239 (for formal communications intended for entry)

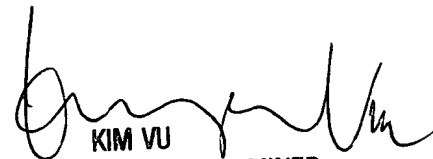
or:

(703) 746-7240 (for informal or draft communications, or Customer Service Center, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

AL  


  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Sep. 6<sup>th</sup>, 2002.